

Appln. No. 10/761,370
Amdt. dated August 10, 2006
Reply to Office action of February 10, 2006

REMARKS

Claims 1 and 17-19 presently appear in this case. No claims have been allowed. The official action of February 10, 2006, has now been carefully studied. Reconsideration and allowance are hereby respectfully urged.

Briefly, the present invention relates to a molecule comprising an antibody or an active fragment thereof specific for the RAP-2 protein, whose sequence is SEQ ID NO:4. The molecule may be a monoclonal antibody, a chimeric antibody and/or it may be detectably labeled.

The examiner states that the lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors and applicants' cooperation has been requested in correcting any errors of which applicants may become aware in the specification.

The specification has now been amended to correct the errors that have been brought to our attention by the examiner and which have come to the attention of the undersigned. If any additional errors are noted by the examiner, it is requested that he bring them to the attention of the undersigned. Whenever an error is brought to the attention of the undersigned, the specification will be amended to correct it.

The examiner has objected to the disclosure because of several informalities. The examiner states that the Brief Description of the Drawings does not properly refer to each panel of the figures.

Appln. No. 10/761,370
Amdt. dated August 10, 2006
Reply to Office action of February 10, 2006

The specification has now been amended in order to correct this informality.

The examiner states that Figure 3 contains sequences and thus the description of Figure 3 should be amended to refer to the appropriate SEQ ID NOs.

The description of the figures has now been amended in order to refer to the appropriate SEQ ID NOs, thus obviating this part of the objection.

The examiner states that the application contains sequence disclosures that are encompassed by the definitions set forth in 37 C.F.R. §1.821(a)(1) and (a)(2), but that the application fails to comply with the requirements of 37 C.F.R. §1.821-1.825. The examiner refers to Figure 3, as well as the sequence set forth in paragraph [0171].

The specification has now been amended to ascribe a SEQ ID NO to the sequence set forth in paragraph [0171] and to add this sequence to the SEQ ID listing. All of the sequences in Figure 3 already appeared in the existing SEQ ID listing and appropriate references thereto have now been added to the specification wherever appropriate. In the course of reviewing the sequences, however, it was noted that the Sequence Listing contained errors in SEQ ID NOs:7 and 8. Each of these was one amino acid shorter than the sequence shown in the corresponding part of Figure 3. A comparison of the SEQ ID listing to the figure indicates that, in both cases, a single amino acid was omitted from the SEQ ID listing. The attached Sequence Listing corrects these errors and the

Appln. No. 10/761,370
Amdt. dated August 10, 2006
Reply to Office action of February 10, 2006

sequences in the listing should now be identical to the sequences shown in the figures.

A substitute paper copy Sequence Listing section according to 37 C.F.R. §1.821(c) is attached hereto. Furthermore, attached hereto is a 3 1/2" disk containing the "Sequence Listing" in computer readable form in accordance with 37 C.F.R. §1.821(e).

Applicants have amended the specification to insert SEQ ID Nos, as supported in the present specification.

The following statement is provided to meet the requirements of 37 C.F.R. §1.821(f) and 1.821(g) §1.825(a) and 1.825(b).

I hereby state, in accordance with 37 C.F.R. §1.825(a), that the amendments included in the substitute sheets of the sequence listing are believed to be supported in the application as filed and that the substitute sheets of the sequence listing are not believed to include new matter.

I hereby further state, in accordance with 37 C.F.R. §1.825(b), that the attached copy of the computer readable form is the same as the attached substitute paper copy of the sequence listing.

Under U.S. rules, each sequence must be classified in <213> as an "Artificial Sequence", a sequence of "Unknown" origin, or a sequence originating in a particular organism, identified by its scientific name.

Neither the rules nor the MPEP clarify the nature of the relationship which must exist between a listed sequence

and an organism for that organism to be identified as the origin of the sequence under <213>.

Hence, counsel may choose to identify a listed sequence as associated with a particular organism even though that sequence does not occur in nature by itself in that organism (it may be, e.g., an epitopic fragment of a naturally occurring protein, or a cDNA of a naturally occurring mRNA, or even a substitution mutant of a naturally occurring sequence). Hence, the identification of an organism in <213> should not be construed as an admission that the sequence *per se* occurs in nature in said organism.

Similarly, designation of a sequence as "artificial" should not be construed as a representation that the sequence has no association with any organism. For example, a primer or probe may be designated as "artificial" even though it is necessarily complementary to some target sequence, which may occur in nature. Or an "artificial" sequence may be a substitution mutant of a natural sequence, or a chimera of two or more natural sequences, or a cDNA (i.e., intron-free sequence) corresponding to an intron-containing gene, or otherwise a fragment of a natural sequence.

The Examiner should be able to judge the relationship of the enumerated sequences to natural sequences by giving full consideration to the specification, the art cited therein, any further art cited in an IDS, and the results of his or her sequence search against a database containing known natural sequences.

Appln. No. 10/761,370
Amdt. dated August 10, 2006
Reply to Office action of February 10, 2006

If the examiner has any questions or comments concerning the sequence listing in the above described application, the examiner is urged to contact the undersigned at the phone number below.

Claims 1 and 5 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite. The examiner states that "whose protein sequence is that of SEQ ID NO:4" is vague and indefinite, but it would be remedial to delete "that of."

Claim 1 has now been amended as suggested by the examiner, thus obviating this alleged ground of indefiniteness.

The examiner states that claim 1 is further indefinite in recitation of "or a derivative thereof."

Claim 1 has now been amended to delete reference to derivative, thus obviating this part of the rejection.

The examiner states that claim 5 is indefinite for several reasons. However, claim 5 has now been deleted, thus obviating this part of the rejection.

Claims 1 and 5 have been rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The examiner states that claim 1 recites the antibody is specific for RAP-2 protein, whose sequence is "that" of SEQ ID NO:4, and this language encompasses "isoforms, analogs, fragments or derivatives" of RAP-2. The examiner states in paragraph 19 of the official

Appln. No. 10/761,370
Amdt. dated August 10, 2006
Reply to Office action of February 10, 2006

action that deletion of the phrase "that of" would be remedial to obviate the present rejection.

Claim 1 has now been amended to delete "that of," thus obviating this part of the rejection.

Claim 5 has also been rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement.

The deletion of claim 5 obviates both the written description and the enablement rejection of previously-appearing claim 5. Reconsideration and withdrawal of these rejections are therefore respectfully urged.

Claim 1 has been amended to change the preamble to read, "A molecule comprising an antibody" This language is used to ensure that the claim encompasses the antibody conjugated to other sequences, such as for the purpose of detectably labeling the antibody. Note that the term "antibody molecule" is used in paragraph [0204]. Conjugation of the antibody to another molecule so as to detectably label it is described, for example, at paragraphs [0198]-[0203].

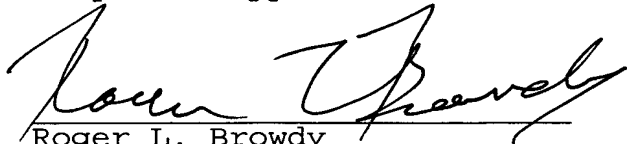
New claims 17-18 have now been added to specify that the antibody is a monoclonal antibody (see paragraph [0181]) or a chimeric antibody (see paragraph [0182]). New claim 19 is specifically directed to the antibody that is detectably labeled. It is believed that these claims are now in condition for allowance as all of the objections to original claim 1 have been obviated.

Appln. No. 10/761,370
Amdt. dated August 10, 2006
Reply to Office action of February 10, 2006

It is submitted that all of the claims now present in the case clearly define over the references of record and fully comply with 35 U.S.C. §112. Reconsideration and allowance are therefore earnestly solicited.

Respectfully submitted,

BROWDY AND NEIMARK, P.L.L.C.
Attorneys for Applicant(s)

By 
Roger L. Browdy
Registration No. 25,618

RLB:rd
Telephone No.: (202) 628-5197
Facsimile No.: (202) 737-3528
G:\BN\I\inl2\Wallach27A\Pto\2006-08-10AmendB.doc